

INSPECTION DEVICE FOR RADAR ABSORBING MATERIALS

ABSTRACT

(040) The invention is a device for inspecting an assembly including a surface coating containing magnetic radar-absorbing materials on a conductive surface. In detail, the device includes a first system for transmitting an electromagnetic signal to the assembly, which includes a first waveguide made of a conductive material coupled in series to a second waveguide made of a dielectric material. A second system is provided for receiving the portion of the electromagnetic signal reflected from the assembly, which includes a third waveguide made of a conductive material coupled in series to a fourth waveguide made of a dielectric material. Thus the electromagnetic signal is transmitted from the first waveguide to the second waveguide on to the assembly and the portion of the electromagnetic signal reflected off the assembly is received by the fourth waveguide and transmitted to the third waveguide.